

## Summary

A magneto-resistive layer system (15) is provided, in which a layer arrangement (15) is provided in an environment of a magneto-resistive layer stack (14) working on the basis of the GMR effect or the AMR effect, in particular the layer arrangement (15) generating a resulting magnetic field that acts upon the magneto-resistive layer stack (14). The layer arrangement (15) has a first magnetic layer (12) and a second magnetic layer (13), which are separated from one another by a non-magnetic intermediate layer (11) and are ferromagnetically exchange-coupled via the intermediate layer (11). Furthermore, a sensor element having such a layer system (5) is provided, particularly for the detection of magnetic fields with respect to their strength and/or direction.

(Figure 1)